

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patentee : BIAGI et al.  
Patent No. : 7090641  
Issued : August 15, 2006  
For : ULTRASOUND IMAGE FOCUSING METHOD AND RELATIVE  
ULTRASOUND SYSTEM  
Dated : September 19, 2006

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
ATTN.: Mail Stop DAC

REQUEST FOR CERTIFICATE OF CORRECTION  
UNDER 37 CFR § 1.322

Patentee respectfully requests that a Certificate of Correction under 37 CFR § 1.322 be issued for the above identified patent properly identifying the Assignee as Actis Active Sensors S.r.l. and Esaote S.p.A.. The Letters Patent received by Patentee's representatives lists the Assignee as Actis Active Sensors S.r.l. and Esaote S.p.A.. This is incorrect.

For verification, Patentee submits a copy of the Assignment clearly showing the Assignee as Actis Active Sensors S.r.l. and Esaote S.p.A..

For your convenience, Patentee encloses a copy of the Letters Patent cover page with the correction indicated and a Certificate of Correction.

Based upon this evidence, Patentee respectfully requests that a Certificate of Correction be issued for the above identified patent properly identifying the Assignee as Actis Active Sensors S.r.l. and Esaote S.p.A., at no cost to the Patentee as this was due to U.S. Patent Office error.

Favorable action is respectfully requested.

Respectfully submitted  
for Patentee(s),



By: \_\_\_\_\_  
John James McGlew  
Registration No. 31,903  
For: MCGLEW AND TUTTLE, P.C.

JJM:  
71212-5

Enclosures: Copy of Incorrect Letters Patent cover page  
Certificate of Correction  
Assignment

DATED: September 19, 2006  
SCARBOROUGH STATION  
SCARBOROUGH, NEW YORK 10510-0827  
(914) 941-5600

NOTE: IF THERE IS ANY FEE DUE AT THIS TIME, PLEASE CHARGE IT TO OUR  
DEPOSIT ACCOUNT NO. 13-0410 AND ADVISE.



US007090641B2

(12) **United States Patent**  
**Biagi et al.**

(10) **Patent No.:** **US 7,090,641 B2**  
 (45) **Date of Patent:** **Aug. 15, 2006**

(54) **ULTRASOUND IMAGE FOCUSING METHOD AND RELATIVE ULTRASOUND SYSTEM**

5,935,068 A \* 8/1999 Zhu et al. .... 600/443  
 6,608,585 B1 \* 8/2003 Benitz ..... 342/25 R  
 6,704,438 B1 \* 3/2004 Alexandra ..... 382/128

(75) **Inventors:** **Elena Biagi**, Florence (IT); **Leonardo Masotti**, Florence (IT); **Marco Scabia**, Florence (IT); **Iacopo Rossi**, Grosseto (IT); **Nicola Dreoni**, Florence (IT)

\* cited by examiner

(73) **Assignees:** **Actis Active Sensors S.r.l.**, (IT);  
**Esaqte S.p.A.**, (IT) ←

**Primary Examiner**—Francis J. Jaworski  
 (74) **Attorney, Agent, or Firm**—McGlew & Tuttle, PC

(\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 185 days.

(57) **ABSTRACT**

(21) **Appl. No.:** **10/718,333**

(22) **Filed:** **Nov. 20, 2003**

(65) **Prior Publication Data**

US 2004/0143187 A1 Jul. 22, 2004

(30) **Foreign Application Priority Data**

Nov. 22, 2002 (IT) ..... FI2002A0228

(51) **Int. Cl.**  
**A61B 8/00** (2006.01)

(52) **U.S. Cl.** ..... **600/443**

(58) **Field of Classification Search** ..... **600/437,**  
**600/442, 443, 447; 73/1.82, 602; 367/46,**  
**367/119**

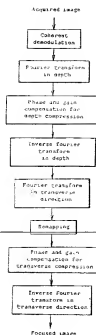
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,793,703 A \* 8/1998 Shippey ..... 367/88

**20 Claims, 24 Drawing Sheets**



### ASSIGNMENT OF PATENT APPLICATION

WHEREAS, We, the undersigned have invented certain new and useful improvements in an invention entitled:

ULTRASOUND IMAGE FOCUSING METHOD AN RELATIVE ULTRASOUND SYSTEM

the invention(s) and improvement(s) set forth therein, and any and all continuations, continuations-in-part, divisionals, and renewals of and substitutes for said application for said Letters Patent, and all the rights and privileges under any and all Letters Patent that may be granted therefor in any country, and any reissues, or reexaminations, or extensions of said Letters Patent.

AND WHEREAS, 1) Actis Active Sensors S.r.l. 2) Esaote S.p.A.

with a principal place of business at: \_\_\_\_\_

1) Via Baldanzese 17 - 50041 CALENZANO, FIRENZE Italy

2) Via Ruffino Aliora 32 - 15033 CASALE MONFERRATO, ALESSANDRIA Italy

(hereinafter referred to as Assignee) is desirous of acquiring an interest therein-and-in the Letters Patent to be obtained therefore from the United States.

NOW THEREFORE, be it known by all whom it may concern, that for an in consideration of the sum of One Dollar (\$1.00) (or the equivalent thereof in foreign currency) and other valuable consideration to us in hand paid, the receipt of which is hereby acknowledged, we have assigned, sold and set over and by these presents assign, sell and set over unto said Assignee for the territory of the United States of America and not elsewhere, the full and exclusive right, title and interest in and to the said invention, as fully set forth and described in the specification prepared and executed by us on: 27 NOV. 2003, filed on \_\_\_\_\_, as

Serial No. \_\_\_\_\_, preparatory to obtaining Letters Patent therefore; said invention, application and Letters Patent to be held and enjoyed by the said Assignee for its own use and behoof and for the use and behoof its successors and assigns to the full end of the term for which said Letters Patent is granted, as fully and entirely as the same would have been held by us had this Assignment and sale not been made; and we further hereby authorize Assignee or its attorneys or agents to insert the correct serial number and filing date into this assignment, if none is indicated on that date of our execution of this Assignment.

We agree that, when requested, we will, without charge to said Assignee but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for said securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in said Assignee, its successors, assigns and legal representatives or nominees.

We authorize and empower the said Assignee, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from us.

We hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of the said Assignee or nominee to claim the aforesaid benefit of the right of priority provided by the International convention which may henceforth be substituted for it.

We covenant with said Assignee, its successors, assigns and legal representatives, that the rights and property herein conveyed are free and clear of any encumbrance, and that we have full right to convey the same as herein expressed.

IN WITNESS WHEREOF, We have hereunto signed our names on the day and year set forth below.

- & First Inventor=s Name Elena BIAGI Printed Name *Elena Biagi* Signature DATE 27 NOV. 2003 Day/Month/Year  
First Inventor=s Signature *Elena Biagi*
- & Second Inventor=s Name Leonardo MASOTTI Printed Name *Leonardo Masotti* Signature DATE 27 NOV. 2003 Day/Month/Year  
Second Inventor=s Signature *Leonardo Masotti*
- & Third Inventor=s Name Marco SCABIA Printed Name *Marco Scabia* Signature DATE 27 NOV. 2003 Day/Month/Year  
Third Inventor=s Signature *Marco Scabia*
- & Fourth Inventor=s Name Iacopo ROSSI Printed Name *Iacopo Rossi* Signature DATE 27 NOV. 2003 Day/Month/Year  
Fourth Inventor=s Signature *Iacopo Rossi*
- & Fifth Inventor=s Name Nicola DREONI Printed Name *Nicola Dreoni* Signature DATE 27 NOV. 2003 Day/Month/Year  
Fifth Inventor=s Signature *Nicola Dreoni*
- & Sixth Inventor=s Name \_\_\_\_\_ Printed Name \_\_\_\_\_ Signature DATE \_\_\_\_\_ Day/Month/Year  
Sixth Inventor=s Signature \_\_\_\_\_
- & Seventh Inventor=s Name \_\_\_\_\_ Printed Name \_\_\_\_\_ Signature DATE \_\_\_\_\_ Day/Month/Year  
Seventh Inventor=s Signature \_\_\_\_\_
- & Eighth Inventor=s Name \_\_\_\_\_ Printed Name \_\_\_\_\_ Signature DATE \_\_\_\_\_ Day/Month/Year  
Eighth Inventor=s Signature \_\_\_\_\_
- & Ninth Inventor=s Name \_\_\_\_\_ Printed Name \_\_\_\_\_ Signature DATE \_\_\_\_\_ Day/Month/Year  
Ninth Inventor=s Signature \_\_\_\_\_
- & Tenth Inventor=s Name \_\_\_\_\_ Printed Name \_\_\_\_\_ Signature DATE \_\_\_\_\_ Day/Month/Year  
Tenth Inventor=s Signature \_\_\_\_\_

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

PATENT NO. : 7090641

Page 1 of 1

APPLICATION NO.: 10/718,333

ISSUE DATE : August 15, 2006

INVENTOR(S) : BIAGI et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

The Assignee be changed to:

Actis Active Sensors S.r.l. and Esaote S.p.A.

**MAILING ADDRESS OF SENDER (Please do not use customer number below):**

McGlew and Tuttle, PC  
Scarborough Station  
Scarborough, New York 10510

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*